

Preliminary Amendment filed herewith

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (Currently amended) ~~An animal~~ Animal-feed additives additive based on a fermentation liquor, ~~containing at least comprising:~~

- a) one or more cysteine compounds selected from the group consisting of L-cysteine, L-cystine, and thiazolidines, ~~including their~~ and salts thereof, and
- b) from 2% to 100% of ~~the further~~ other non-cellular ingredients of the fermentation liquor.

Claim 2. (Currently Amended) ~~An animal~~ Animal-feed additives additive based on a fermentation liquor, ~~containing at least comprising:~~

- a) a thiazolidine ~~thiazolidines alone~~ or together with L-cysteine, ~~and/or~~ L-cystine, ~~including their~~ salts thereof and combinations thereof, and
- b) from 2% to 100% of ~~the further~~ other non-cellular ingredients of the fermentation liquor.

Claim 3. (Currently Amended) ~~The animal~~ Animal-feed additives additive according to Claim 1 or 2, wherein the ~~thiazolidines are~~ thiazolidine is one or more compounds selected from the group consisting of 2-methyl-thiazolidine-2,4-dicarboxylic acid, 2-carboxymethyl-thiazolidine-2,4-dicarboxylic acid, 2-carboxyethyl-thiazolidine-2,4-dicarboxylic acid, and thiazolidine-2,4-dicarboxylic acid.

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Claim 4. (Currently Amended) ~~The animal~~ Animal-feed additives additive according to Claim 1 or 2, wherein the ~~salts salt~~ of the cysteine ~~compounds are compound~~ is one or more salts selected from the group consisting of the sodium, potassium, ammonium, magnesium ~~or~~ and calcium salt.

Claim 5. (Currently Amended) ~~The animal~~ Animal-feed additives additive according to Claim 1 or 2, wherein the fermentation liquor contains a ~~containing the~~ biomass ~~that is~~ formed during the fermentation of ~~the a~~ cysteine-compound-producing ~~microorganisms~~ microorganism in an amount ~~of~~ ranging from 0% to 100%.

Claim 6. (Currently Amended) ~~The animal~~ Animal-feed additives additive according to Claim 5, ~~wherein said~~ containing the biomass ~~formed during the fermentation of the~~ cysteine-compound-producing-microorganisms ranges in an amount of >0% to ≤50% in the animal-feed additive.

Claim 7. (Currently Amended) ~~The animal~~ Animal-feed additives additive according to Claim 5, ~~wherein said~~ containing the biomass ~~formed during the fermentation of the~~ cysteine-compound-producing-microorganisms ranges in an amount of >50% to 100% in the animal-feed additive.

Claim 8. (Currently Amended) ~~The animal~~ Animal-feed additives additive according to Claim 1, ~~wherein said~~ containing cysteine ~~compound or salt thereof~~ compounds, including their salts, is present in the feed in an amount ~~of~~ ranging from 1 to 98 wt.%.

Claim 9. (Currently Amended) ~~The animal~~ Animal-feed additives additive according to Claim 1 or 2, ~~containing~~ which further comprises one or more chemical compounds selected from the group consisting of glutathione, cystathionine, biotin, thiamin, liponic acid, coenzyme A and L- methionine.

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Claim 10. (Currently Amended) ~~The animal~~ Animal-feed additives additive according to ~~Claims Claim~~ Claim 1 to 9, wherein they are present which is in liquid form.

Claim 11. (Currently Amended) ~~The animal~~ Animal-feed additives additive according to ~~Claims Claim~~ Claim 1 to 9, wherein they are present which is in solid form.

Claim 12. (Currently Amended) ~~A process~~ Process for the production of ~~a feed additives~~ additive, comprising:

a) separating ~~the a~~ biomass completely (~~100%~~) from ~~a~~ fermentation ~~liquor~~ liquors containing cysteine compounds selected from the group consisting of L-cysteine, L-cystine, and thiazolidines, ~~including their and~~ salts thereof, and

b) optionally concentrating the mixture so obtained by removal of water.

Claim 13. (Currently Amended) ~~A process~~ Process for the production of ~~a feed additives~~ additive that ~~are is~~ low in biomass, comprising:

a) separating virtually all or at least the predominant part (~~≥50% to <100%~~) of the biomass from ~~a~~ fermentation ~~liquors~~ liquor containing cysteine compounds selected from the group consisting of L-cysteine, L- cystine, and thiazolidines, ~~including their and~~ salts thereof, and

b) optionally concentrating the mixture so obtained by removal of water.

Claim 14. (Currently Amended) ~~A process~~ Process for the production of ~~a feed additives~~ additive that ~~are is~~ rich in biomass, comprising:

a) leaving all or the majority (~~from 100% to >50%~~) of the biomass in ~~a~~ fermentation ~~liquors~~ liquor containing cysteine compounds selected from the group consisting of L-cysteine, L-cystine and thiazolidines, ~~including their and~~ salts thereof, and

b) optionally concentrating the mixture so obtained by removal of water.

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Claim 15. (Currently amended) ~~The process~~ Process according to ~~Claims Claim~~ Claim 12, 13 or 14, ~~wherein which~~ further comprises:

c) ~~preparing the feed additive product by is produced by one or more measures selected from the group drying, spray drying, spray granulation granulating and granulation granulating the fermentation liquor obtained.~~

Claim 16. (Currently Amended) ~~The process~~ Process according to ~~Claims Claim~~ Claim 12, 13, 14 or 15, wherein, for the preparation of the fermentation liquor containing cysteine compounds, L-cysteine-producing bacteria, fungi or yeasts are cultivated in ~~a suitable~~ said fermentation medium.

Claim 17. (Currently Amended) ~~The process~~ Process according to ~~Claims Claim~~ Claim 12, 13, 14, 15 or 16, ~~wherein which further comprises~~ one or more of the following steps are additionally carried out:

d) ~~electrochemical reduction electrochemically reducing~~ (electrolysis) ~~of the L-cystine to L-cysteine in one or more both~~ of steps a) and b);

e) ~~acidification acidifying the fermentation medium~~ with a concentrated mineral acid in one or more ~~both~~ of steps a) and b);

f) ~~addition of adding~~ a reducing agent to ~~the fermentation medium of~~ one or more of steps a), b) and c);

g) ~~use of a protecting the fermentation medium with a gas~~ in one or more of steps a), b) and c);

h) ~~addition of adding~~ an oxidizing agent to ~~the fermentation medium of~~ one or more of steps a), b) and c);

i) ~~addition of adding~~ one or more cysteine compounds selected from the group

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~~consisting of~~ L-cysteine, L-cystine and thiazolidines to the fermentation medium of one or more of steps a), b) and c), the added amount of cysteine compound being such that the total concentration thereof, optionally including its salts, in the animal-feed additive is in the range from 1 to 98 wt.%;

j) ~~addition of adding~~ auxiliary substances to the fermentation medium of one or more of steps a), b) and c), for stabilization and increasing the storability, selected from the group consisting of silicas, silicates, stearates, meals, brans, cereal flours, flours, silicas, silicates, starches and sugars; or

k) ~~conversion of converting~~ the substances obtained according to steps c) to j) into a form stable in ~~the an~~ animal's stomach by coating the feed with a film-forming ~~agents~~ agent.

Claim 18. (Currently Amended) The process ~~Process~~ according to Claim 17, wherein the mineral acid is sulfuric acid.

Claim 19. (Currently Amended) The process ~~Process~~ according to Claim 17, wherein the reducing agent is one or more chemical compounds selected from the group consisting of vitamin C, vitamin E, formic acid and ~~the~~ salts thereof.

Claim 20. (Currently Amended) The process ~~Process~~ according to Claim 17, wherein the oxidizing agent is at least one ~~or more~~ chemical ~~compounds~~ compound selected from the group consisting of oxygen (O_2) and hydrogen peroxide (H_2O_2).

Claim 21. (Currently Amended) The process ~~Process~~ according to Claim 17, wherein the protecting gas is nitrogen (N_2).

Claim 22. (Currently Amended) The process ~~Process~~ according to Claim 17, wherein the film-forming agent is one or more substances selected from the group metal carbonates, silicas, silicates, alginates, stearates, starches, rubbers or cellulose ethers.

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Claim 23. (Currently Amended) ~~An animal~~ Animal-feed additive produced according to ~~the process of Claim~~ Claims 12, 13 or 14 to 22.

Claim 24. (Currently Amended) The animal ~~Animal~~-feed additive according to Claim 23, containing which comprises from 1 wt.% to 98 wt.% of one or more cysteine compounds selected from the group consisting of L-cysteine, L-cystine, and thiazolidines, and optionally including their salts thereof.

Claim 25. (Currently Amended) The animal ~~Animal~~-feed additive according to Claim 2, wherein the thiazolidine content is at least 0.001 wt.% ~~or at least 0.01 w.% or at least 0.1 wt.% or at least traces.~~